

FIG.1

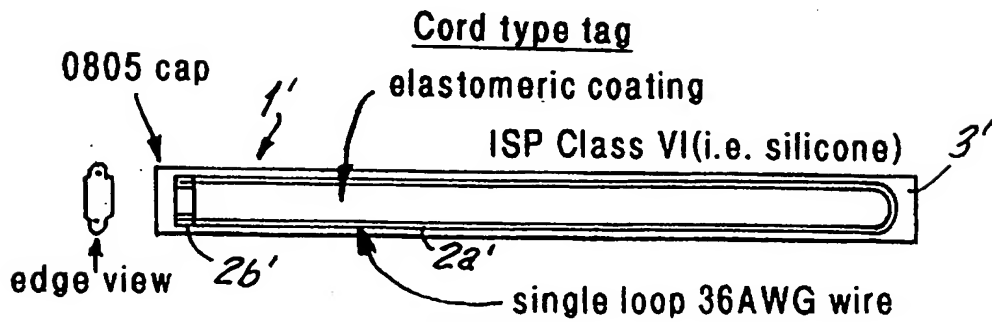
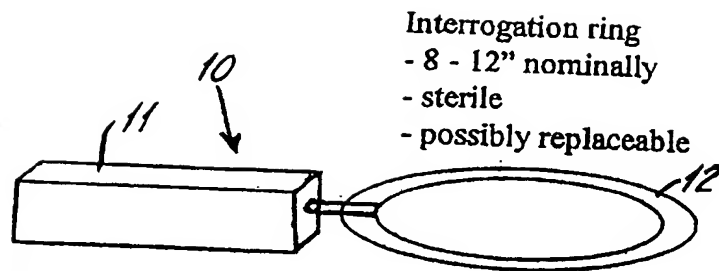


FIG.2



Interrogation ring
 - 8 - 12" nominally
 - sterile
 - possibly replaceable

Hand held detector device
 - electromagnetic
 - wideband
 - ~ 12 detection range
 - hand held sized

FIG.3A

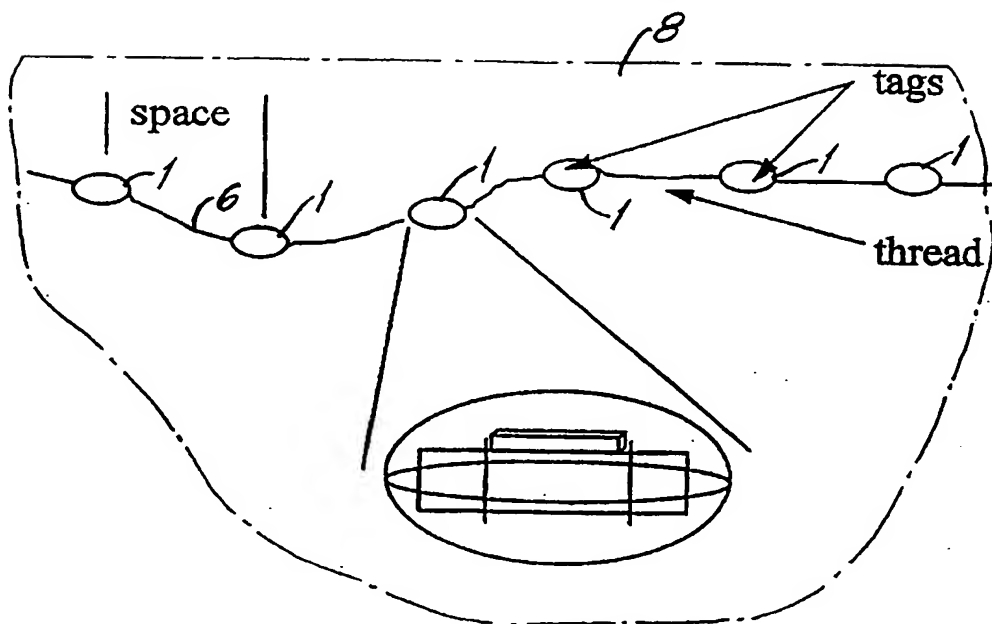


FIG.4

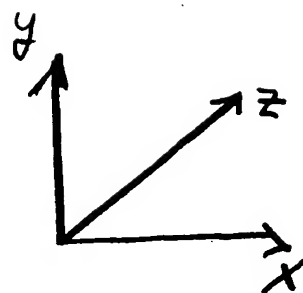
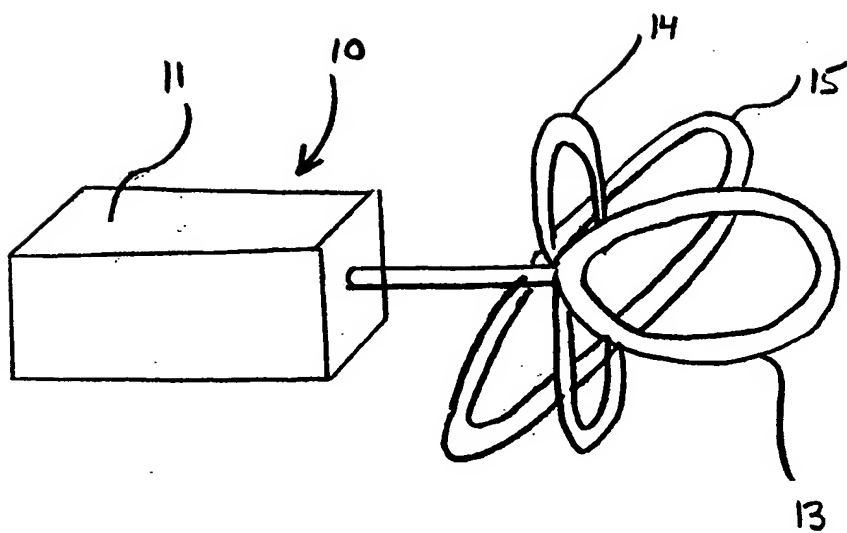


FIG 3B

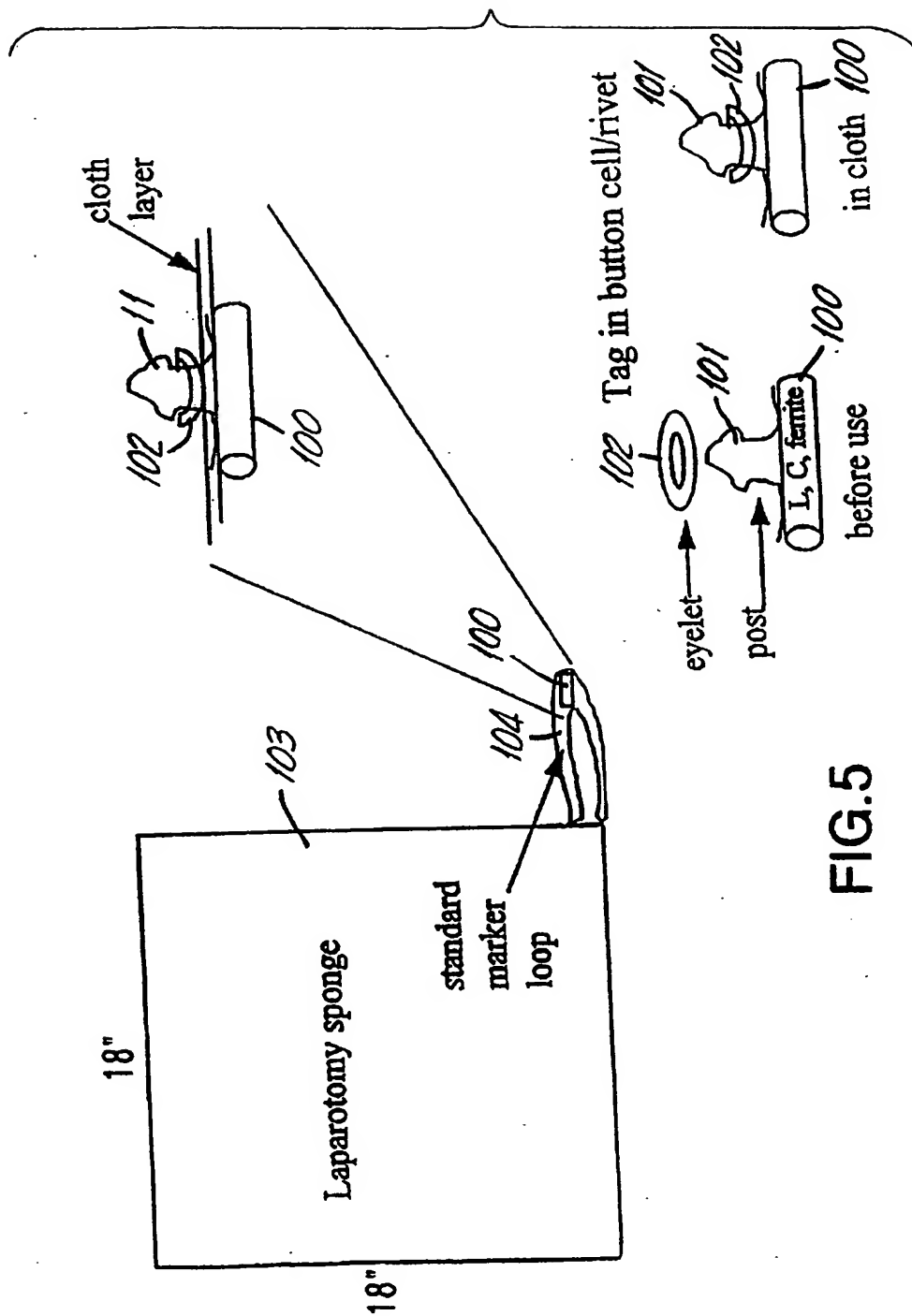


FIG. 5

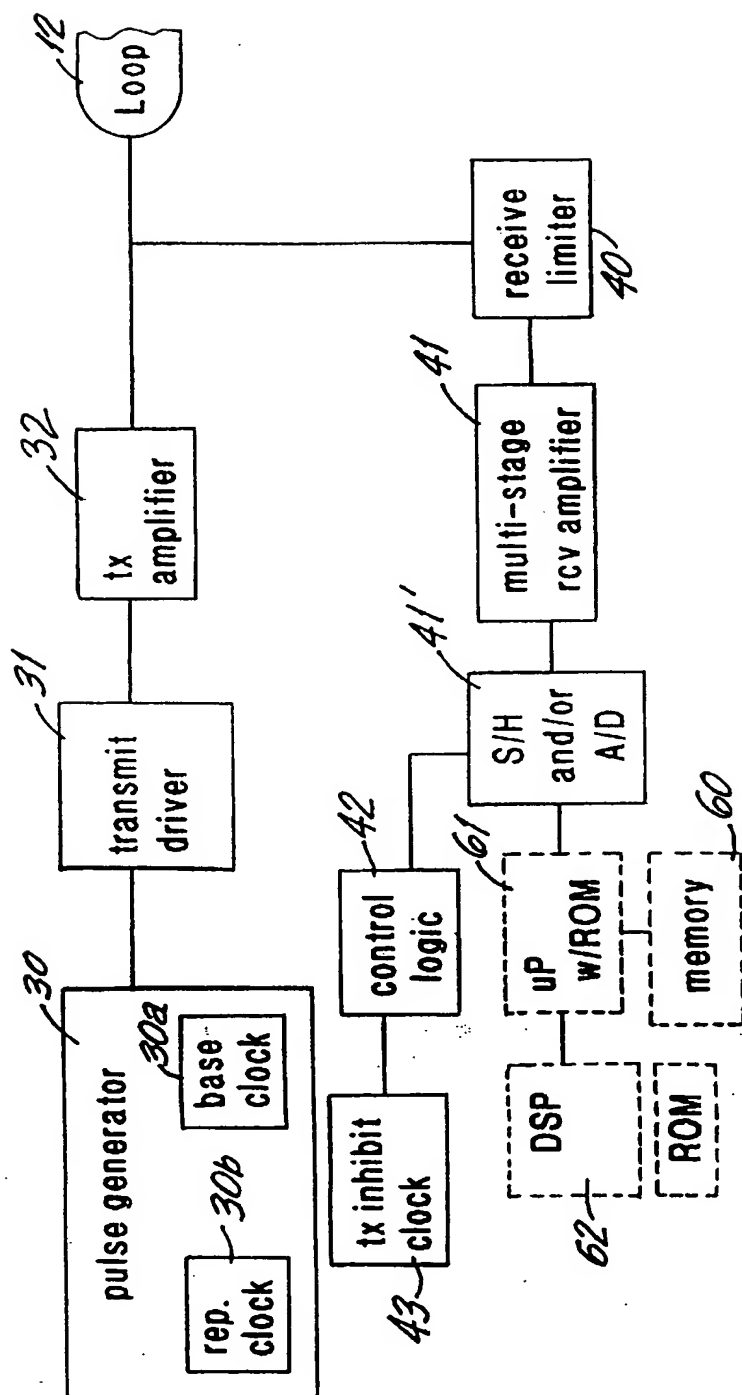


FIG. 6A

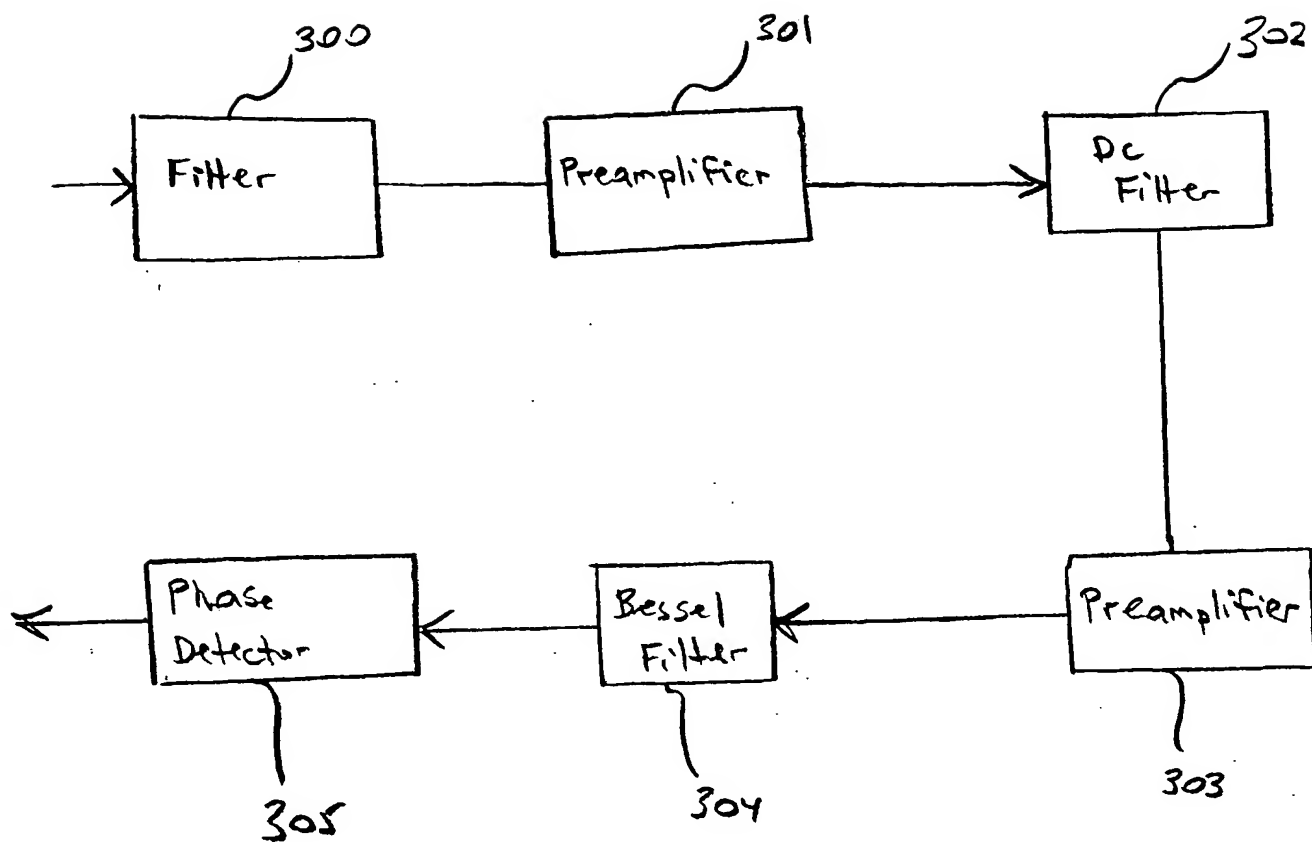


FIG. 6B

FIG. 7A

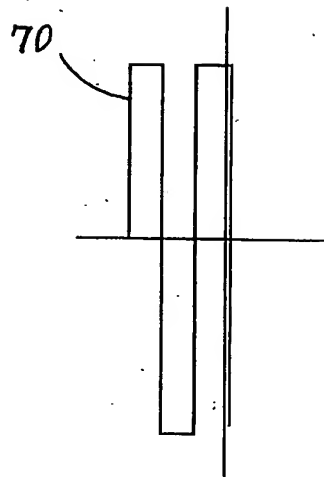
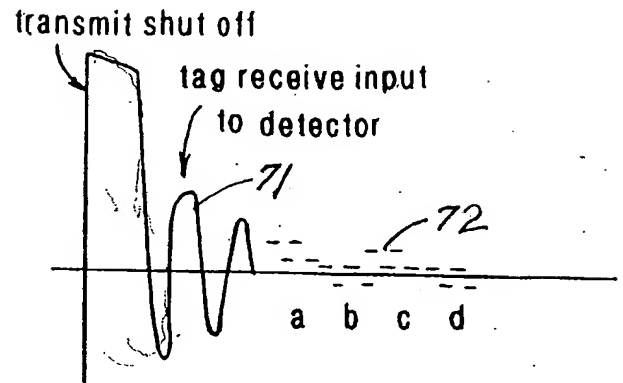


FIG. 7B



Ideal wideband transmit pulses

Traditional sinusoidal transmit signal not shown

Transmitter energy decay with wideband pulse excitation

Transmitter energy decay with traditional narrow band sinusoidal excitation

Tag signal acquisition above noise with wideband energy decay

Tag signal

Transmitter off time

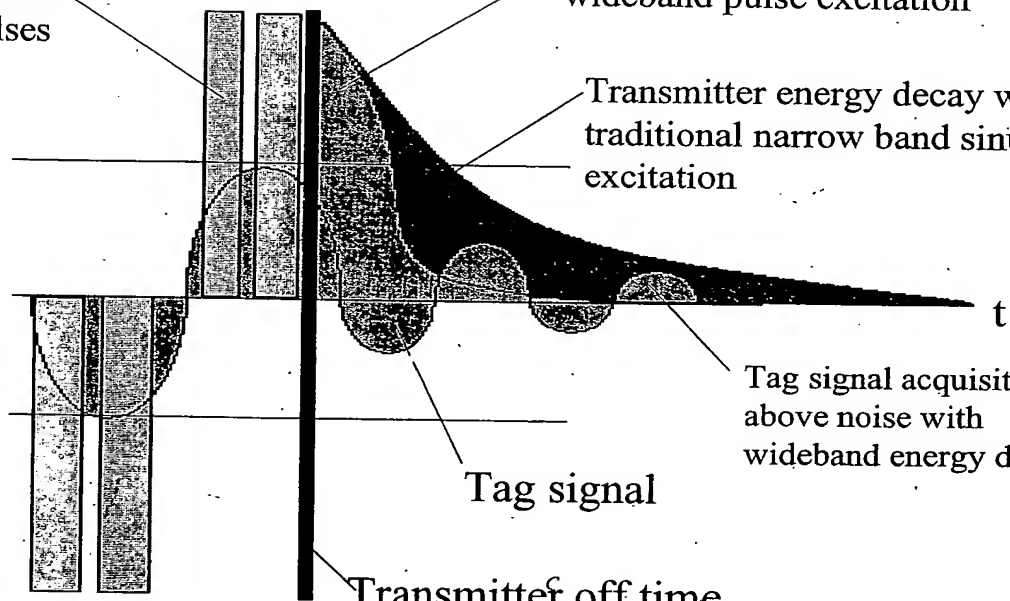


FIG. 7C

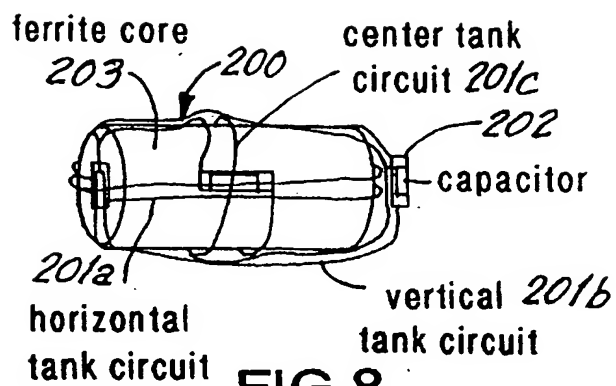


FIG. 8

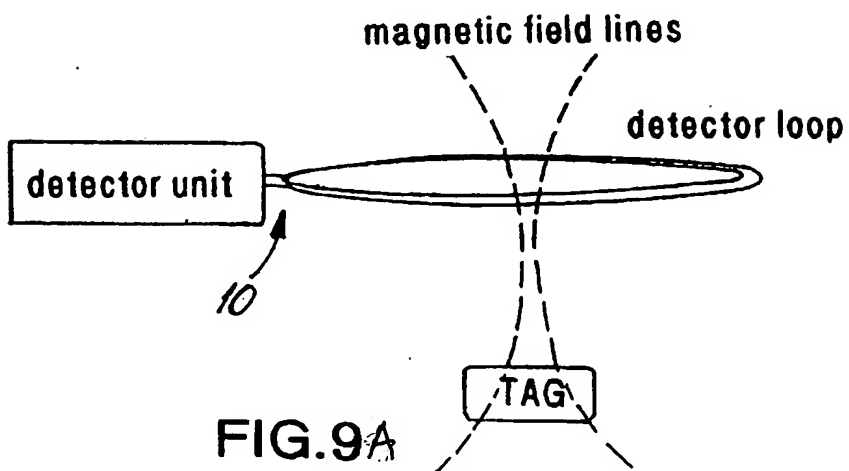


FIG. 9A

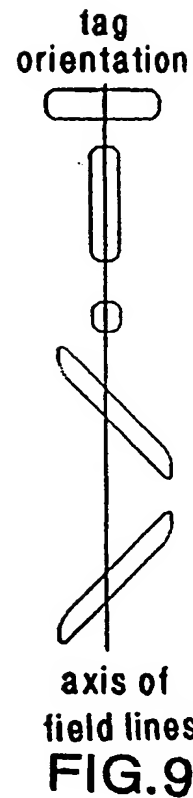


FIG. 9B